

(FILE 'HOME' ENTERED AT 15:16:14 ON 22 JAN 2002)

L1 FILE 'REGISTRY' ENTERED AT 15:16:26 ON 22 JAN 2002  
1 S TRENBOLONE/CN

FILE 'CAPLUS' ENTERED AT 15:16:52 ON 22 JAN 2002

L2 FILE 'REGISTRY' ENTERED AT 15:17:06 ON 22 JAN 2002  
1 S MELENGESTROL/CN

FILE 'CAPLUS' ENTERED AT 15:17:43 ON 22 JAN 2002  
L3 27 S L2  
L4 254 S L1  
L5 4 S L3 AND L4  
L6 38270 S IMPLANT OR DEPOT  
L7 0 S L5 AND L6  
L8 38 S L4 AND L6

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:491544 CAPLUS

DOCUMENT NUMBER: 105:91544

TITLE: Synchronization of estrus in postpartum beef cows  
with

melengestrol acetate and prostaglandin F2.alpha.

AUTHOR(S): Beal, W. E.; Good, G. A.

CORPORATE SOURCE: Virginia Polytech. Inst. and State Univ., Blacksburg,  
VA, 24061, USA

SOURCE: J. Anim. Sci. (1986), 63(2), 343-7

CODEN: JANSAG; ISSN: 0021-8812

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Synchronization of estrus in postpartum beef cows with melengestrol  
acetate and prostaglandin F2.alpha.

AB The combination of melengestrol [5633-18-1] as acetate (MGA)  
fed for 9 days (d) and PGF2.alpha. [551-11-1] administered on the last  
day of MGA feeding synchronized estrus in cyclic cows (94%) and induced  
estrus in anestrus cows (66%) as effectively as combining PGF2.alpha.  
with a progestin **implant** (97 and 75%, resp.). In the 2nd expt.,  
MGA treatment was necessary for 4 d prior to administering PGF2.alpha. to  
maximize the expression of estrus in cyclic and anestrus cows. In both  
expts. the proportion of cows exhibiting a synchronized estrus and the  
pregnancy rates tended to be higher for cows that were cyclic prior to  
treatment. However, the MGA-PGF2.alpha. treatments consistently induced  
estrus in >50% of the anestrus cows and .apprx.33% of the cows that were  
anestrus prior to treatment conceived during the synchronized breeding  
period. The MGA-PGF2.alpha. treatment was 33-46% less expensive than a  
comparable estrous synchronization method that is approved by the U.S.  
Food and Drug Administration. If feeding MGA nd administering

PGF2.alpha.  
is approved, it may be the treatment of choice for synchronizing estrus  
in  
cyclic cows and inducing estrus in anestrus cows when supplemental  
feeding is feasible.

AB The combination of melengestrol [5633-18-1] as acetate (MGA)  
fed for 9 days (d) and PGF2.alpha. [551-11-1] administered on the last  
day of MGA feeding synchronized estrus in cyclic cows (94%) and induced  
estrus in anestrus cows (66%) as effectively as combining PGF2.alpha.  
with a progestin **implant** (97 and 75%, resp.). In the 2nd expt.,  
MGA treatment was necessary for 4 d prior to administering PGF2.alpha. to  
maximize the expression of estrus in cyclic and anestrus cows. In both  
expts. the proportion of cows exhibiting a synchronized estrus and the  
pregnancy rates tended to be higher for cows that were cyclic prior to  
treatment. However, the MGA-PGF2.alpha. treatments consistently induced  
estrus in >50% of the anestrus cows and .apprx.33% of the cows that were  
anestrus prior to treatment conceived during the synchronized breeding  
period. The MGA-PGF2.alpha. treatment was 33-46% less expensive than a  
comparable estrous synchronization method that is approved by the U.S.  
Food and Drug Administration. If feeding MGA nd administering

PGF2.alpha.  
is approved, it may be the treatment of choice for synchronizing estrus  
in  
cyclic cows and inducing estrus in anestrus cows when supplemental  
feeding is feasible.

IT 5633-18-1

RL: BIOL (Biological study)

(estrus synchronization by, in cows, PGF2.alpha. in relation to)

L8 ANSWER 1 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:274905 CAPLUS

DOCUMENT NUMBER: 134:352756

TITLE: Hormone contents in peripheral tissues after correct and off-label use of growth promoting hormones in cattle: effect of the **implant** preparations

AUTHOR(S): Finaplix-H, Ralgro, Synovex-H and Synovex Plus Lange, Iris G.; Daxenberger, A.; Meyer, H. H. D.

CORPORATE SOURCE: Institut fur Physiologie, Technische Universitat Munchen-Weihenstephan, Freising, D-85354, Germany

SOURCE: APMIS (2001), 109(1), 53-65

CODEN: APMSEL; ISSN: 0903-4641

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Certain hormonal growth promoters are licensed in several beef producing countries outside the European Union (EU). Use in compliance with Good Veterinary Practice is mandatory. As risk assessment of hormone residues in animal tissues up to now has neglected potential off-label use, the present study dealt with two topics: (1) multiple treatment with the **implant** prepns. Finaplix-H (200 mg trenbolone acetate), Ralgro (36 mg zeranol) and Synovex-H (200 mg testosterone propionate plus 20 mg estradiol benzoate) in heifers (1-fold, 3-fold and 10-fold dose), and (2) non-approved treatment of female veal calves (1-fold dose of Synovex-H or Synovex Plus with 200 mg trenbolone acetate plus 28 mg estradiol benzoate). Residues of estradiol-17.beta., estradiol-17.alpha., estrone and testosterone, trenbolone-17.beta., trenbolone-17.alpha. and trendione or zeranol, resp., were measured in loin, liver, kidney and peri-renal

fat

by HPLC/enzyme immunoassay (HPLC/EIA) after liq.-liq. extn. and solid-phase clean-up. The hormone residues in the multiple-dose expts. were dose-dependent and partially exceeded the threshold values: in the liver in one animal after 3-fold dose and in two animals after 10-fold dose of Finaplix-H, and in the liver and kidney after 3-fold and 10-fold dose of Synovex-H. Mean hormone residues in calves were mainly below those of heifers and did not infringe threshold values.

TI Hormone contents in peripheral tissues after correct and off-label use of growth promoting hormones in cattle: effect of the **implant** preparations Finaplix-H, Ralgro, Synovex-H and Synovex Plus

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

TI Hormone contents in peripheral tissues after correct and off-label use of growth promoting hormones in cattle: effect of the **implant** preparations Finaplix-H, Ralgro, Synovex-H and Synovex Plus

AB Certain hormonal growth promoters are licensed in several beef producing countries outside the European Union (EU). Use in compliance with Good Veterinary Practice is mandatory. As risk assessment of hormone residues in animal tissues up to now has neglected potential off-label use, the present study dealt with two topics: (1) multiple treatment with the **implant** prepns. Finaplix-H (200 mg trenbolone acetate), Ralgro (36 mg zeranol) and Synovex-H (200 mg testosterone propionate plus 20 mg estradiol benzoate) in heifers (1-fold, 3-fold and 10-fold dose), and (2) non-approved treatment of female veal calves (1-fold dose of Synovex-H or Synovex Plus with 200 mg trenbolone acetate plus 28 mg estradiol benzoate). Residues of estradiol-17.beta., estradiol-17.alpha., estrone and testosterone, trenbolone-17.beta., trenbolone-17.alpha. and trendione or zeranol, resp., were measured in loin, liver, kidney and peri-renal

fat

by HPLC/enzyme immunoassay (HPLC/EIA) after liq.-liq. extn. and solid-phase clean-up. The hormone residues in the multiple-dose expts. were dose-dependent and partially exceeded the threshold values: in the liver in one animal after 3-fold dose and in two animals after 10-fold dose of Finaplix-H, and in the liver and kidney after 3-fold and 10-fold dose of Synovex-H. Mean hormone residues in calves were mainly below those of heifers and did not infringe threshold values.

IT 50-28-2, Estra-1,3,5(10)-triene-3,17-diol (17.beta.)-, biological studies 53-16-7, Estrone, biological studies 57-91-0 58-22-0, Testosterone 4642-95-9, Trendione 10161-33-8 80657-17-6  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (hormones of peripheral tissues after correct and off-label use of growth promoting hormones in calves and heifers)

L8 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:904899 CAPLUS

DOCUMENT NUMBER: 135:127067

TITLE: Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

CORPORATE SOURCE: Food Drug Administration, HHS, Center Veterinary Medicine, Food Drug Administration, Rockville, MD, 20855, USA

SOURCE: Fed. Regist. (2000), 65(228), 70662-70663, 27 Nov 2000

CODEN: FEREAC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

TI Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

ST cattle implant tylosin trenbolone estradiol wt gain

IT Beef cattle

Body weight

(cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT Drug delivery systems

(implants; cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone 74610-55-2, Tylosin tartrate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

L8 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:314511 CAPLUS

DOCUMENT NUMBER: 132:326072

TITLE: Improved growth stimulant compositions

INVENTOR(S): Shih, Chung; Kennedy, Thomas J.; Knight, Peter James;  
Robins, Daniel S.; Shao, Zezhi Jesse  
PATENT ASSIGNEE(S): Schering Corporation, USA  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025743	A2	20000511	WO 1999-US23993	19991102
WO 2000025743	A3	20000824		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 9914996 A 20010710 BR 1999-14996 19991102  
PRIORITY APPLN. INFO.: US 1998-185944 A 19981104  
WO 1999-US23993 W 19991102

AB An improved wt. and growth stimulant for domesticated animals such as cattle, pigs and sheep is comprised of an anabolic agent that is s.c. administered in the form of a dual release **implant** formulation. Increased gains are particularly improved when zeranol is administered in an immediate-release and controlled-release formulation which allows for

a one-time dosage injection.

TI Improved growth stimulant compositions

AB An improved wt. and growth stimulant for domesticated animals such as cattle, pigs and sheep is comprised of an anabolic agent that is s.c. administered in the form of a dual release **implant** formulation. Increased gains are particularly improved when zeranol is administered in an immediate-release and controlled-release formulation which allows for

a one-time dosage injection.

ST cattle anabolic subcutaneous **implant** zeranol

IT Anabolic agents  
Cattle  
Sheep  
Swine  
(controlled-release s.c. injectable anabolic **implants** for animals)

IT Growth promoters, animal  
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(controlled-release s.c. injectable anabolic **implants** for animals)

IT Drug delivery systems  
(**implants**, controlled-release; controlled-release s.c. injectable anabolic **implants** for animals)

IT 50-28-2, Estradiol, biological studies 50-50-0, Estradiol benzoate  
57-83-0, Progesterone, biological studies 57-85-2, Testosterone propionate 58-22-0, Testosterone 9002-72-6, Somatotropin  
10161-33-8, Trenbolone 10161-34-9, Trenbolone acetate  
18559-94-9, Salbutamol 26538-44-3, Zeranol

RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(controlled-release s.c. injectable anabolic **implants** for  
animals)

IT 9004-32-4, Sodium CMC 9004-57-3, Ethyl cellulose 9004-62-0,  
Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose  
9004-67-5, Methyl cellulose 9011-87-4, Methyl acrylate-methyl  
methacrylate copolymer 26780-50-7, DL-Lactide-glycolide copolymer  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(controlled-release s.c. injectable anabolic **implants** for  
animals)

IT 50-70-4, Sorbitol, biological studies 50-99-7, Dextrose, biological  
studies 57-50-1, Sucrose, biological studies 63-42-3, Lactose  
69-65-8, D-Mannitol 9005-25-8, Starch, biological studies 9005-25-8D,  
Starch, hydrolyzates  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(diluent; controlled-release s.c. injectable anabolic **implants**  
for animals)

L8 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:323183 CAPLUS

DOCUMENT NUMBER: 131:101698

TITLE: Implantation or Injectable Dosage Form New Animal  
Drugs; Trenbolone Acetate and Estradiol Benzoate

CORPORATE SOURCE: Food and Drug Administration, USA

SOURCE: Fed. Regist. (1999), 64(72), 18573-18574, 15 Apr 1999

CODEN: FEREAC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending, under the Federal  
Food, Drug, and Cosmetic Act, the animal drug regulations to reflect  
approval of a supplemental new animal drug application (NADA) filed by  
Fort Dodge Animal Health. The supplemental NADA provides for use of a  
trenbolone acetate-estradiol benzoate **implant** in steers fed in  
confinement for slaughter for increased rate of wt. gain. At this time,  
FDA is also amending the regulation for trenbolone tolerances to  
establish

an acceptable daily intake (ADI) for the drug.

TI Implantation or Injectable Dosage Form New Animal Drugs; Trenbolone  
Acetate and Estradiol Benzoate

AB The Food and Drug Administration (FDA) is amending, under the Federal  
Food, Drug, and Cosmetic Act, the animal drug regulations to reflect  
approval of a supplemental new animal drug application (NADA) filed by  
Fort Dodge Animal Health. The supplemental NADA provides for use of a  
trenbolone acetate-estradiol benzoate **implant** in steers fed in  
confinement for slaughter for increased rate of wt. gain. At this time,  
FDA is also amending the regulation for trenbolone tolerances to  
establish

an acceptable daily intake (ADI) for the drug.

ST trenbolone estradiol **implant** growth promoter std; steer growth  
promoter trenbolone estradiol std

IT Drug delivery systems  
(**implants**; stds. for trenbolone acetate-estradiol benzoate  
**implants** for increase of wt. gain in steers)

IT Standards, legal and permissive  
(stds. for trenbolone acetate-estradiol benzoate **implants** for  
increase of ~~wt. gain in steers~~)

IT Growth promoters, animal

RL: AGR (Agricultural use); BAC (Biological activity or effector, except

adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stds. for trenbolone acetate-estradiol benzoate **implants** for  
increase of wt. gain in steers)

IT Cattle

(steers; stds. for trenbolone acetate-estradiol benzoate  
**implants** for increase of wt. gain in steers)

IT 50-50-0, Estradiol Benzoate 10161-34-9, Trenbolone Acetate

RL: AGR (Agricultural use); BAC (Biological activity or effector, except  
adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stds. for trenbolone acetate-estradiol benzoate **implants** for  
increase of wt. gain in steers)

IT 10161-33-8, Trenbolone

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(tolerance for; stds. for trenbolone acetate-estradiol benzoate  
**implants** for increase of wt. gain in steers)

L8 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:102330 CAPLUS

DOCUMENT NUMBER: 128:226408

TITLE: Effect of a combined trenbolone acetate and estradiol  
**implant** on steady-state IGF-I mRNA  
concentrations in the liver of wethers and the  
longissimus muscle of steers

AUTHOR(S): Johnson, B. J.; White, M. E.; Hathaway, M. R.;  
Christians, C. J.; Dayton, W. R.

CORPORATE SOURCE: Animal Growth and Development Laboratory, Department  
of Animal Science, University of Minnesota, St. Paul,  
55108, USA

SOURCE: J. Anim. Sci. (1998), 76(2), 491-497

CODEN: JANSAG; ISSN: 0021-8812

PUBLISHER: American Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined  
**implant** contg. 40 mg of trenbolone acetate (TBA) and 8 mg of  
estradiol (E2) increased ADG 25% and feed efficiency 23% compared with  
unimplanted lambs. By d 3 following implantation, sera from wethers  
implanted with TBA + E2 showed 32% (307 vs. 233 ng/mL) increases in IGF-I  
concn. compared with sera from unimplanted wethers. This increase was  
maintained throughout the entire 24-d study. Steady-state hepatic IGF-I  
mRNA levels were increased approx. 150% in implanted lambs compared with  
unimplanted lambs. These data suggest that liver may be the source of at  
least part of the increased circulating IGF-I in TBA + E2-implanted  
sheep.

In steers implanted with Revalor-S (120 mg of TBA and 24 mg of E2) for 40  
d, the steady-state concn. of IGF-I mRNA in the longissimus muscle was

68%

greater than in the longissimus muscle of unimplanted steers.  
Consequently, increased local prodn. of IGF-I by muscle tissue may play a  
role in increasing circulating IGF-I concns. as well as an autocrine or  
paracrine role in stimulating muscle growth in steers implanted with  
Revalor-S.

TI Effect of a combined trenbolone acetate and estradiol **implant** on  
steady-state IGF-I mRNA concentrations in the liver of wethers and the  
longissimus muscle of steers

TI Effect of a combined trenbolone acetate and estradiol **implant** on  
steady-state IGF-I mRNA concentrations in the liver of wethers and the  
longissimus muscle of steers

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined  
**implant** contg. 40 mg of trenbolone acetate (TBA) and 8 mg of

estradiol (E2) increased ADG 25% and feed efficiency 23% compared with unimplanted lambs. By d 3 following implantation, sera from wethers implanted with TBA + E2 showed 32% (307 vs. 233 ng/mL) increases in IGF-I concn. compared with sera from unimplanted wethers. This increase was maintained throughout the entire 24-d study. Steady-state hepatic IGF-I mRNA levels were increased approx. 150% in implanted lambs compared with unimplanted lambs. These data suggest that liver may be the source of at least part of the increased circulating IGF-I in TBA + E2-implanted

sheep.

In steers implanted with Revalor-S (120 mg of TBA and 24 mg of E2) for 40 d, the steady-state concn. of IGF-I mRNA in the longissimus muscle was

68%

greater than in the longissimus muscle of unimplanted steers.

Consequently, increased local prodn. of IGF-I by muscle tissue may play a role in increasing circulating IGF-I concns. as well as an autocrine or paracrine role in stimulating muscle growth in steers implanted with Revalor-S.

IT Cattle  
Liver  
Muscle  
Sheep

(combined trenbolone and estradiol **implant** effects on IGF-I in liver of wethers and muscle of steers)

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)

(combined trenbolone and estradiol **implant** effects on IGF-I in liver of wethers and muscle of steers)

IT 67763-96-6, Insulin-like growth factor I  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(combined trenbolone and estradiol **implant** effects on IGF-I in liver of wethers and muscle of steers)

L8 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:767377 CAPLUS

DOCUMENT NUMBER: 128:71699

TITLE: Black market in anabolic steroids-analysis of illegally distributed products

AUTHOR(S): Musshoff, Frank; Daldrup, Thomas; Ritsch, Mathias

CORPORATE SOURCE: Institute of Legal Medicine, Rheinische Friedrich-Wilhelms-University, Bonn, Germany

SOURCE: J. Forensic Sci. (1997), 42(6), 1119-1125

CODEN: JFSCAS; ISSN: 0022-1198

PUBLISHER: American Society for Testing and Materials

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Anabolic steroids found in the illegal market often do not contain ingredients declared on the label. Forty-two products encountered in the illegal distribution channels were analyzed by gas chromatog./mass spectrometry. Fifteen of the products did not contain the expected ingredients. Mainly, counterfeits of parabolane and primobolan products were found. Instead of trenbolone or metenolone, the cheaper agents nandrolone or testosterone derivs. were identified. In one product the gestagene progesterone was found. In two other cases no steroid was present or tocopherol was substituted.

TI Black market in anabolic steroids-analysis of illegally distributed products

IT 53-39-4, Oxandrolone 57-83-0, Progesterone, biological studies  
57-85-2, Testosterone propionate 58-18-4, 17-Methyltestosterone  
58-19-5, Drostanolone 58-22-0, Testosterone 62-90-8, Nandrolone



phenylpropionate 72-63-9, Methandron 153-00-4, Metenolone 303-42-4, Primobolan Depot 315-37-7 360-70-3, Extraboline 434-05-9, Metenolone acetate 434-07-1, Synasteron 50 434-22-0, Nandrolone 521-10-8, Methandriol 521-12-0, Masteron 846-48-0, Boldenone 862-89-5, Dynabolon 1255-49-8, Testosterone phenylpropionate 3593-85-9, Methandriol dipropionate 5721-91-5, Testosterone decanoate 10161-33-8, Trenbolone 10161-34-9, Trenbolone acetate 10418-03-8, Winstrol Depot 13103-34-9, Boldefarm 15262-86-9, Testosterone isocaproate 54175-25-6, Testoviron Depot 250 68924-89-0, Sustanon-250 75026-40-3, Ambosex 200721-94-4, Omnadren 200721-95-5, Sustanon 100

RL: ADV (Adverse effect, including toxicity); ANT (Analyte); ANST (Analytical study); BIOL (Biological study)

(black market in anabolic steroids-anal. of illegally distributed products with relevance to anal. by GC-MS)

L8 ANSWER 7 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:437729 CAPLUS

DOCUMENT NUMBER: 127:104537

TITLE: Response of castrated male sheep to estrogenic and androgenic compounds implanted alone or in

combination

AUTHOR(S): Galbraith, H.; Singh, S. B.; Scaife, J. R.

CORPORATE SOURCE: Department of Agriculture, University of Aberdeen, Aberdeen, AB24 5UA, UK

SOURCE: Anim. Sci. (1997), 64(2), 261-269

CODEN: ANSCFO; ISSN: 1357-7298

PUBLISHER: Durrant Periodicals

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Forty-eight Greyface wether lambs, aged about 6 mo and weighing 32 kg on av. were used. They were allocated to be treated, by s.c. implantation in

the upper surface of the ear flap, with the naturally occurring steroids estradiol-17 $\beta$ . (O), testosterone (T) or the synthetically produced androgen trenbolone acetate (TA). Treatment groups were as follows: sham-implanted controls (C); 50 mg O (slow release formulation) (O); 40

mg TA (compressed pellets) (TA); 50 mg T (compressed pellets) (T); 15 mg O + 40 mg TA (TAO); 15 mg O + 50 mg T (TO). Combined implants were placed in close proximity under the skin of the same ear. The lambs were offered, to appetite, a good quality diet contg. per kg dry matter (DM) an

estd. 12.0 MJ metabolizable energy and 150 g crude protein. Comparisons were made for the main effects of O and the androgens T and TA. Main effects due to O were increased DM intake, live-wt. gain (LWG) empty body wt. (EBW), chilled carcass wt. (CCW), carcass crude protein (CP) deposition, plasma insulin concns. and teat length with redns. recorded for the proportion but not wt. of fat in the carcass, plasma urea and thyroxine concns. Treatment with androgens did not, on av., influence

LWG or other indexes of growth performance or carcass compn. other than to produce significant increases in carcass phosphorus deposition and redn. in the depth of thorax. Significant increases in the wt. of penile tissue

and redns. in teat length were recorded. There was evidence for a greater

androgenic effect on penile tissue and anti-estrogenic effect (on teat length) of TA compared with T at the concns. used. TA also reduced the wt. of the thymus gland, an effect reversed in the presence of O. Anal.

of plasma taken from the vein contralateral to the site of implantation showed that O concns. were reduced in the presence of TA and T, and that

O had no effect on the concns. of androgens measured. Concns. of T and 17.beta.-hydroxytrenbolone in blood were of a similar order, which for T is typical of postpubertal entire male sheep. The results suggest that O treatment was effective in promoting growth and carcass CP deposition which was not increased by T or TA, despite the presence of these androgens at biol. active concns. in blood. This effect appears to differ

TI from the additive effects frequently obtained for castrated male cattle. Response of castrated male sheep to estrogenic and androgenic compounds implanted alone or in combination

AB Forty-eight Greyface wether lambs, aged about 6 mo and weighing 32 kg on av. were used. They were allocated to be treated, by s.c. implantation

in the upper surface of the ear flap, with the naturally occurring steroids estradiol-17.beta. (O), testosterone (T) or the synthetically produced androgen trenbolone acetate (TA). Treatment groups were as follows: sham-implanted controls (C); 50 mg O (slow release formulation) (O); 40

mg TA (compressed pellets) (TA); 50 mg T (compressed pellets) (T); 15 mg O + 40 mg TA (TAO); 15 mg O + 50 mg T (TO). Combined **implants** were placed in close proximity under the skin of the same ear. The lambs were offered, to appetite, a good quality diet contg. per kg dry matter (DM)

an estd. 12.0 MJ metabolizable energy and 150 g crude protein. Comparisons were made for the main effects of O and the androgens T and TA. Main effects due to O were increased DM intake, live-wt. gain (LWG) empty body wt. (EBW), chilled carcass wt. (CCW), carcass crude protein (CP) deposition, plasma insulin concns. and teat length with redns. recorded for the proportion but not wt. of fat in the carcass, plasma urea and thyroxine concns. Treatment with androgens did not, on av., influence

LWG or other indexes of growth performance or carcass compn. other than to produce significant increases in carcass phosphorus deposition and redn. in the depth of thorax. Significant increases in the wt. of penile

tissue and redns. in teat length were recorded. There was evidence for a greater

androgenic effect on penile tissue and anti-estrogenic effect (on teat length) of TA compared with T at the concns. used. TA also reduced the wt. of the thymus gland, an effect reversed in the presence of O. Anal. of plasma taken from the vein contralateral to the site of implantation showed that O concns. were reduced in the presence of TA and T, and that

O had no effect on the concns. of androgens measured. Concns. of T and 17.beta.-hydroxytrenbolone in blood were of a similar order, which for T is typical of postpubertal entire male sheep. The results suggest that O treatment was effective in promoting growth and carcass CP deposition which was not increased by T or TA, despite the presence of these androgens at biol. active concns. in blood. This effect appears to differ

ST from the additive effects frequently obtained for castrated male cattle. estrogen androgen **implant** anabolic ram

IT 10161-33-8, Estra-4,9,11-trien-3-one, 17-hydroxy-, (17.beta.)-  
 RL: BPR (Biological process); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (estrogenic and androgenic compds. implanted alone or in combination  
 anabolic effect on castrated male sheep)

L8 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:618686 CAPLUS  
DOCUMENT NUMBER: 125:257197  
TITLE: **Implant** packages for veterinary use  
PATENT ASSIGNEE(S): American Home Products Corp., USA  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 08206176	A2	19960813	JP 1995-275894	19951024
	BR 9504552	A	19970902	BR 1995-4552	19951025
PRIORITY APPLN. INFO.:				US 1994-329562	19941026
AB	Trenbolone-contg. <b>implants</b> for veterinary use are sealed in light-blocking containers with inert gases. The prepsns. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.				
TI	<b>Implant</b> packages for veterinary use				
TI	<b>Implant</b> packages for veterinary use				
AB	Trenbolone-contg. <b>implants</b> for veterinary use are sealed in light-blocking containers with inert gases. The prepsns. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.				
ST	<b>implant</b> package veterinary				
IT	Veterinary medicine ( <b>implant</b> packages contg. trenbolone for veterinary use)				
IT	Pharmaceutical dosage forms ( <b>implants</b> , <b>implant</b> packages contg. trenbolone for veterinary use)				
IT	10161-33-8, Trenbolone RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>implant</b> packages contg. trenbolone for veterinary use)				

L8 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:433703 CAPLUS  
DOCUMENT NUMBER: 125:113572  
TITLE: **Implant** program effects on performance and carcass quality of steer calves finished for 212 days  
AUTHOR(S): Samber, J. A.; Tatum, J. D.; Wray, M. I.; Nichols, W. T.; Morgan, J. B.; Smith, G. C.  
CORPORATE SOURCE: Department of Animal Sciences, Colorado State University, Fort Collins, CO, 80523, USA  
SOURCE: J. Anim. Sci. (1996), 74(7), 1470-1476  
CODEN: JANSAG; ISSN: 0021-8812  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality traits of crossbred steer calves (n = 560) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV of d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d

(RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher ( $P < .05$ ) shear force values than steaks from CON steers.

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality traits of crossbred steer calves ( $n = 560$ ) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV of d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d 130 (RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin

steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher (P < .05)

shear force values than steaks from CON steers.

ST trenbolone **implant** carcass meat beef

IT Animal growth

Cattle

Food functional properties

(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT Meat

(beef, **implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT 10161-33-8, Trenbolone

RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)

(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

L8 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:622306 CAPLUS

DOCUMENT NUMBER: 121:222306

TITLE: Effect of naturally occurring and synthetic androgens on growth, body composition and muscle glucocorticoid receptors in wether lambs

AUTHOR(S): Galbraith, H.; Berry, A. D.

CORPORATE SOURCE: School Agriculture, University Aberdeen, Aberdeen, AB9

1UD, UK

SOURCE: Anim. Prod. (1994), 58(3), 357-64

CODEN: ANIPA8; ISSN: 0003-3561

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Twenty five Border Leicester female X Blackface male wether lambs aged about 4 mo and weighing on av. 28.5 kg were allocated to be treated with the naturally occurring steroid testosterone or trenbolone acetate or nandrolone phenylpropionate which are steroids synthetically produced. Treatment groups were as follows: untreated controls (C); 50 mg testosterone (T); 50 mg trenbolone acetate (TA) 50 mg testosterone + 50

mg

trenbolone acetate (TTA) or 50 mg nandrolone phenylpropionate (N).

**Implants** were given at 100 and again at 63 days before slaughter.

The lambs were offered to appetite a good quality diet contg. per kg dry matter, an estd. 11.0 M metabolizable energy and 185 g crude protein.

Comparisons were made for the main effects of T and TA and also

interactions between T and TA. Effects due to N were assessed statistically against untreated controls. Treatment with T, on av.,

increased live-wt. gain (LWG), empty body wt. (EBW) and reduced backfat thickness and the wt. (g/kg EBW) of perirenal and retroperitoneal fat.

Main effects due to TA were increases in killing-out ratio and depth of the gigot joint and redns. in backfat thickness. Treatment with N

increased the empty body wt. and (g/kg) carcass ash. Non-significant trends were suggested for increases in carcass crude protein due to T and TA treatments. T and TA but not N treatments exhibited marked androgenic

activity in increasing the wt. (mg/kg EBW) of the accessory vesicular gland. TA and N, but not T, reduced the wt. (g/kg EBW) of the thymus

gland. The max. binding capacity of post-mortem skeletal muscle (m. gluteus) for (3H)-dexamethasone was reduced by TA but increased by T and N. These results suggest differences in the binding capacity of

corticosteroid receptors which may be related to differences in the effects of T and TA on protein metab. in skeletal muscle.

TI Effect of naturally occurring and synthetic androgens on growth, body composition and muscle glucocorticoid receptors in wether lambs

AB Twenty five Border Leicester female X Blackface male wether lambs aged about 4 mo and weighing on av. 28.5 kg were allocated to be treated with the naturally occurring steroid testosterone or trenbolone acetate or nandrolone phenylpropionate which are steroids synthetically produced. Treatment groups were as follows: untreated controls (C); 50 mg testosterone (T); 50 mg trenbolone acetate (TA) 50 mg testosterone + 50 mg trenbolone acetate (TTA) or 50 mg nandrolone phenylpropionate (N). **Implants** were given at 100 and again at 63 days before slaughter. The lambs were offered to appetite a good quality diet contg. per kg dry matter, an estd. 11.0 M metabolizable energy and 185 g crude protein. Comparisons were made for the main effects of T and TA and also interactions between T and TA. Effects due to N were assessed statistically against untreated controls. Treatment with T, on av., increased live-wt. gain (LWG), empty body wt. (EBW) and reduced backfat thickness and the wt. (g/kg EBW) of perirenal and retroperitoneal fat. Main effects due to TA were increases in killing-out ratio and depth of the gigot joint and redns. in backfat thickness. Treatment with N increased the empty body wt. and (g/kg) carcass ash. Non-significant trends were suggested for increases in carcass crude protein due to T and TA treatments. T and TA but not N treatments exhibited marked androgenic activity in increasing the wt. (mg/kg EBW) of the accessory vesicular gland. TA and N, but not T, reduced the wt. (g/kg EBW) of the thymus gland. The max. binding capacity of post-mortem skeletal muscle (m. gluteus) for (3H)-dexamethasone was reduced by TA but increased by T and N. These results suggest differences in the binding capacity of corticosteroid receptors which may be related to differences in the effects of T and TA on protein metab. in skeletal muscle.

IT 58-22-0, Testosterone 434-22-0, Nandrolone 10161-33-8, Trenbolone

RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(androgens effect on growth, body compn., and muscle glucocorticoid receptors in wether lambs)

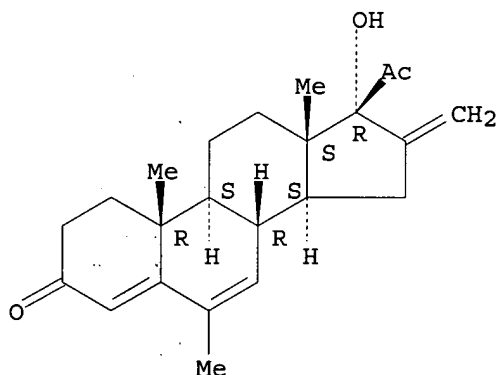
=>

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
RN 5633-18-1 REGISTRY  
CN Pregna-4,6-diene-3,20-dione, 17-hydroxy-6-methyl-16-methylene- (8CI, 9CI)  
(CA INDEX NAME)

OTHER NAMES:

CN 17-Hydroxy-6-methyl-16-methylenepregna-4,6-diene-3,20-dione  
CN Melengesterol  
CN **Melengestrol**  
FS STEREOSEARCH  
MF C23 H30 O3  
LC STN Files: AGRICOLA, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CABA, CAPLUS,  
CBNB, CHEMLIST, DDFU, DRUGU, EMBASE, MRCK\*, PROMT, TOXCENTER, TOXLIT,  
USAN, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, WHO  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

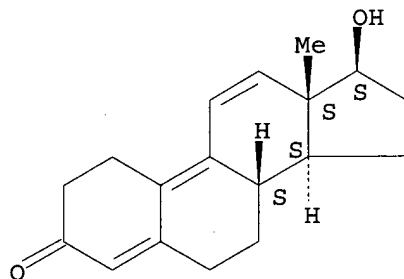


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

27 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
27 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS  
 RN 10161-33-8 REGISTRY  
 CN Estra-4,9,11-trien-3-one, 17-hydroxy-, (17.beta.)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Estra-4,9,11-trien-3-one, 17.beta.-hydroxy- (7CI, 8CI)  
 OTHER NAMES:  
 CN (+)-Trenbolone  
 CN .beta.-Trenbolone  
 CN 17.beta.-Hydroxyestra-4,9,11-trien-3-one  
 CN 17.beta.-Trenbolone  
 CN 9,10,11,12-Dehydro-19-nortestosterone  
 CN RU 2341  
 CN **Trenbolone**  
 CN Trienbolone  
 FS STEREOSEARCH  
 DR 39434-88-3  
 MF C18 H22 O2  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
 CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT,  
 IFIUDB, IPA, MEDLINE, MRCK\*, NIOSHTIC, PROMT, RTECS\*, TOXCENTER,  
 TOXLIT,  
 USAN, USPATFULL, VETU  
 (\*File contains numerically searchable property data)  
 Other Sources: WHO

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

253 REFERENCES IN FILE CA (1967 TO DATE)  
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 253 REFERENCES IN FILE CAPLUS (1967 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)



L8 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:618686 CAPLUS  
DOCUMENT NUMBER: 125:257197  
TITLE: **Implant** packages for veterinary use  
PATENT ASSIGNEE(S): American Home Products Corp., USA  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08206176	A2	19960813	JP 1995-275894	19951024
BR 9504552	A	19970902	BR 1995-4552	19951025

PRIORITY APPLN. INFO.: US 1994-329562 19941026

AB Trenbolone-contg. **implants** for veterinary use are sealed in light-blocking containers with inert gases. The prepsns. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.

TI **Implant** packages for veterinary use

TI **Implant** packages for veterinary use

AB Trenbolone-contg. **implants** for veterinary use are sealed in light-blocking containers with inert gases. The prepsns. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.

ST **implant** package veterinary

IT Veterinary medicine  
(**implant** packages contg. trenbolone for veterinary use)

IT Pharmaceutical dosage forms  
(**implants**, **implant** packages contg. trenbolone for veterinary use)

IT 10161-33-8, Trenbolone  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**implant** packages contg. trenbolone for veterinary use)

L8 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:433703 CAPLUS  
DOCUMENT NUMBER: 125:113572  
TITLE: **Implant** program effects on performance and carcass quality of steer calves finished for 212 days  
AUTHOR(S): Samber, J. A.; Tatum, J. D.; Wray, M. I.; Nichols, W. T.; Morgan, J. B.; Smith, G. C.  
CORPORATE SOURCE: Department of Animal Sciences, Colorado State University, Fort Collins, CO, 80523, USA  
SOURCE: J. Anim. Sci. (1996), 74(7), 1470-1476  
CODEN: JANSAG; ISSN: 0021-8812  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality traits of crossbred steer calves (n = 560) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV of d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d

(RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher ( $P < .05$ ) shear force values than steaks from CON steers.

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality traits of crossbred steer calves ( $n = 560$ ) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV on d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d 130 (RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin

steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher (P < .05) shear force values than steaks from CON steers.

ST trenbolone **implant** carcass meat beef

IT Animal growth  
Cattle  
Food functional properties  
(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT Meat  
(beef, **implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT 10161-33-8, Trenbolone  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)  
(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

L8 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:622306 CAPLUS

DOCUMENT NUMBER: 121:222306

TITLE: Effect of naturally occurring and synthetic androgens on growth, body composition and muscle glucocorticoid receptors in wether lambs

AUTHOR(S): Galbraith, H.; Berry, A. D.

CORPORATE SOURCE: School Agriculture, University Aberdeen, Aberdeen, AB9

SOURCE: 1UD, UK  
Anim. Prod. (1994), 58(3), 357-64  
CODEN: ANIPA8; ISSN: 0003-3561

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Twenty five Border Leicester female X Blackface male wether lambs aged about 4 mo and weighing on av. 28.5 kg were allocated to be treated with the naturally occurring steroid testosterone or trenbolone acetate or nandrolone phenylpropionate which are steroids synthetically produced. Treatment groups were as follows: untreated controls (C); 50 mg testosterone (T); 50 mg trenbolone acetate (TA) 50 mg testosterone + 50

mg

trenbolone acetate (TTA) or 50 mg nandrolone phenylpropionate (N). **Implants** were given at 100 and again at 63 days before slaughter. The lambs were offered to appetite a good quality diet contg. per kg dry matter, an estd. 11.0 M metabolizable energy and 185 g crude protein. Comparisons were made for the main effects of T and TA and also interactions between T and TA. Effects due to N were assessed statistically against untreated controls. Treatment with T, on av., increased live-wt. gain (LWG), empty body wt. (EBW) and reduced backfat thickness and the wt. (g/kg EBW) of perirenal and retroperitoneal fat. Main effects due to TA were increases in killing-out ratio and depth of the gigot joint and redns. in backfat thickness. Treatment with N increased the empty body wt. and (g/kg) carcass ash. Non-significant trends were suggested for increases in carcass crude protein due to T and TA treatments. T and TA but not N treatments exhibited marked androgenic activity in increasing the wt. (mg/kg EBW) of the accessory vesicular gland. TA and N, but not T, reduced the wt. (g/kg EBW) of the thymus gland. The max. binding capacity of post-mortem skeletal muscle (m. gluteus) for (3H)-dexamethasone was reduced by TA but increased by T and N. These results suggest differences in the binding capacity of corticosteroid receptors which may be related to differences in the effects of T and TA on protein metab. in skeletal muscle.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cattle s.c. ear **implant** contg. tylosin tartrate and  
trenbolone and estradiol)

L8 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:314511 CAPLUS

DOCUMENT NUMBER: 132:326072

TITLE: Improved growth stimulant compositions

INVENTOR(S): Shih, Chung; Kennedy, Thomas J.; Knight, Peter James;  
Robins, Daniel S.; Shao, Zezhi Jesse  
PATENT ASSIGNEE(S): Schering Corporation, USA  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025743	A2	20000511	WO 1999-US23993	19991102
WO 2000025743	A3	20000824		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ,  
DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP,  
KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO,  
NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,  
UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 9914996 A 20010710 BR 1999-14996 19991102

PRIORITY APPLN. INFO.: US 1998-185944 A 19981104  
WO 1999-US23993 W 19991102

AB An improved wt. and growth stimulant for domesticated animals such as  
cattle, pigs and sheep is comprised of an anabolic agent that is s.c.  
administered in the form of a dual release **implant** formulation.  
Increased gains are particularly improved when zeranol is administered in  
an immediate-release and controlled-release formulation which allows for

a one-time dosage injection.

TI Improved growth stimulant compositions

AB An improved wt. and growth stimulant for domesticated animals such as  
cattle, pigs and sheep is comprised of an anabolic agent that is s.c.  
administered in the form of a dual release **implant** formulation.  
Increased gains are particularly improved when zeranol is administered in  
an immediate-release and controlled-release formulation which allows for

a one-time dosage injection.

ST cattle anabolic subcutaneous **implant** zeranol

IT Anabolic agents

Cattle

Sheep

Swine

(controlled-release s.c. injectable anabolic **implants** for  
animals)

IT Growth promoters, animal

RL: BAC (Biological activity or effector, except adverse); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)

(controlled-release s.c. injectable anabolic **implants** for  
animals)

IT Drug delivery systems

(**implants**, controlled-release; controlled-release s.c.  
injectable anabolic **implants** for animals)

IT 50-28-2, Estradiol, biological studies 50-50-0, Estradiol benzoate  
57-83-0, Progesterone, biological studies 57-85-2, Testosterone  
propionate 58-22-0, Testosterone 9002-72-6, Somatotropin  
10161-33-8, Trenbolone 10161-34-9, Trenbolone acetate  
18559-94-9, Salbutamol 26538-44-3, Zeranol

by HPLC/enzyme immunoassay (HPLC/EIA) after liq.-liq. extn. and solid-phase clean-up. The hormone residues in the multiple-dose expts. were dose-dependent and partially exceeded the threshold values: in the liver in one animal after 3-fold dose and in two animals after 10-fold dose of Finaplix-H, and in the liver and kidney after 3-fold and 10-fold dose of Synovex-H. Mean hormone residues in calves were mainly below those of heifers and did not infringe threshold values.

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone  
53-16-7, Estrone, biological studies 57-91-0, Testosterone  
4642-95-9, Trenbolone 10161-33-8 80657-17-6  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(hormones of peripheral tissues after correct and off-label use of growth promoting hormones in calves and heifers)

L8 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:904899 CAPLUS

DOCUMENT NUMBER: 135:127067

TITLE: Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

CORPORATE SOURCE: Food Drug Administration, HHS, Center Veterinary Medicine, Food Drug Administration, Rockville, MD, 20855, USA

SOURCE: Fed. Regist. (2000), 65(228), 70662-70663, 27 Nov 2000

CODEN: FEREC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

TI Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

ST cattle implant tylosin trenbolone estradiol wt gain

IT Beef cattle

Body weight

(cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT Drug delivery systems

(implants; cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone  
74610-55-2, Tylosin tartrate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

L8 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:314511 CAPLUS

DOCUMENT NUMBER: 132:326072

TITLE: Improved growth stimulant compositions

by HPLC/enzyme immunoassay (HPLC/EIA) after liq.-liq. extn. and solid-phase clean-up. The hormone residues in the multiple-dose expts. were dose-dependent and partially exceeded the threshold values: in the liver in one animal after 3-fold dose and in two animals after 10-fold dose of Finaplix-H, and in the liver and kidney after 3-fold and 10-fold dose of Synovex-H. Mean hormone residues in calves were mainly below those of heifers and did not infringe threshold values.

IT 50-28-2, Estra-1,3,5(10)-triene-3,17-diol (17.beta.)-, biological studies  
53-16-7, Estrone, biological studies 57-91-0 58-22-0, Testosterone  
4642-95-9, Trendione 10161-33-8 80657-17-6  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(hormones of peripheral tissues after correct and off-label use of growth promoting hormones in calves and heifers)

L8 ANSWER 2 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:904899 CAPLUS

DOCUMENT NUMBER: 135:127067

TITLE: Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

CORPORATE SOURCE: Food Drug Administration, HHS, Center Veterinary Medicine, Food Drug Administration, Rockville, MD, 20855, USA

SOURCE: Fed. Regist. (2000), 65(228), 70662-70663, 27 Nov 2000

CODEN: FEREAC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

TI Implantation or injectable dosage form new animal drugs; trenbolone and estradiol

AB The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a supplemental abbreviated new animal drug application (ANADA) filed by Ivy Labs., Inc. The supplemental ANADA provides for adding tylosin tartrate as a local antibacterial to an approved s.c. cattle ear implant contg. trenbolone and estradiol used in pasture cattle for increased rate of wt. gain.

ST cattle implant tylosin trenbolone estradiol wt gain

IT Beef cattle

Body weight

(cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT Drug delivery systems

(implants; cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone 74610-55-2, Tylosin tartrate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cattle s.c. ear implants contg. tylosin tartrate and trenbolone and estradiol)

L8 ANSWER 3 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:314511 CAPLUS

DOCUMENT NUMBER: 132:326072

TITLE: Improved growth stimulant compositions

L8 ANSWER 4 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:323183 CAPLUS

DOCUMENT NUMBER: 131:101698

TITLE: Implantation or Injectable Dosage Form New Animal Drugs; Trenbolone Acetate and Estradiol Benzoate

CORPORATE SOURCE: Food and Drug Administration, USA

SOURCE: Fed. Regist. (1999), 64(72), 18573-18574, 15 Apr 1999

CODEN: FEREAC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending, under the Federal Food, Drug, and Cosmetic Act, the animal drug regulations to reflect approval of a supplemental new animal drug application (NADA) filed by Fort Dodge Animal Health. The supplemental NADA provides for use of a trenbolone acetate-estradiol benzoate **implant** in steers fed in confinement for slaughter for increased rate of wt. gain. At this time, FDA is also amending the regulation for trenbolone tolerances to establish

an acceptable daily intake (ADI) for the drug.

TI Implantation or Injectable Dosage Form New Animal Drugs; Trenbolone Acetate and Estradiol Benzoate

AB The Food and Drug Administration (FDA) is amending, under the Federal Food, Drug, and Cosmetic Act, the animal drug regulations to reflect approval of a supplemental new animal drug application (NADA) filed by Fort Dodge Animal Health. The supplemental NADA provides for use of a trenbolone acetate-estradiol benzoate **implant** in steers fed in confinement for slaughter for increased rate of wt. gain. At this time, FDA is also amending the regulation for trenbolone tolerances to establish

an acceptable daily intake (ADI) for the drug.

ST trenbolone estradiol **implant** growth promoter std; steer growth promoter trenbolone estradiol std

IT Drug delivery systems

(**implants**; stds. for trenbolone acetate-estradiol benzoate **implants** for increase of wt. gain in steers)

IT Standards, legal and permissive

(stds. for trenbolone acetate-estradiol benzoate **implants** for increase of ~~wt. gain in steers~~)

IT Growth promoters, animal

RL: AGR (Agricultural use); BAC (Biological activity or effector, except

adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stds. for trenbolone acetate-estradiol benzoate **implants** for increase of wt. gain in steers)

IT Cattle

(steers; stds. for trenbolone acetate-estradiol benzoate **implants** for increase of wt. gain in steers)

IT 50-50-0, Estradiol Benzoate 10161-34-9, Trenbolone Acetate

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(stds. for trenbolone acetate-estradiol benzoate **implants** for increase of wt. gain in steers)

IT 10161-33-8, Trenbolone

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(tolerance for; stds. for trenbolone acetate-estradiol benzoate **implants** for increase of wt. gain in steers)

L8 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:102330 CAPLUS

DOCUMENT NUMBER: 128:226408

TITLE: Effect of a combined trenbolone acetate and estradiol **implant** on steady-state IGF-I mRNA concentrations in the liver of wethers and the

implants for increase of wt. gain in steers)  
IT 50-50-0, Estradiol Benzoate 10161-34-9, Trenbolone Acetate  
RL: AGR (Agricultural use); BAC (Biological activity or effector, except  
adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stds. for trenbolone acetate-estradiol benzoate implants for  
increase of wt. gain in steers)  
IT 10161-33-8, Trenbolone  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(tolerance for; stds. for trenbolone acetate-estradiol benzoate  
implants for increase of wt. gain in steers)

L8 ANSWER 5 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:102330 CAPLUS

DOCUMENT NUMBER: 128:226408

TITLE: Effect of a combined trenbolone acetate and estradiol  
implant on steady-state IGF-I mRNA  
concentrations in the liver of wethers and the  
longissimus muscle of steers

AUTHOR(S): Johnson, B. J.; White, M. E.; Hathaway, M. R.;  
Christians, C. J.; Dayton, W. R.

CORPORATE SOURCE: Animal Growth and Development Laboratory, Department  
of Animal Science, University of Minnesota, St. Paul,  
55108, USA

SOURCE: J. Anim. Sci. (1998), 76(2), 491-497

CODEN: JANSAG; ISSN: 0021-8812

PUBLISHER: American Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined  
implant contg. 40 mg of trenbolone acetate (TBA) and 8 mg of  
estradiol (E2) increased ADG 25% and feed efficiency 23% compared with  
unimplanted lambs. By d 3 following implantation, sera from wethers  
implanted with TBA + E2 showed 32% (307 vs. 233 ng/mL) increases in IGF-I  
concn. compared with sera from unimplanted wethers. This increase was  
maintained throughout the entire 24-d study. Steady-state hepatic IGF-I  
mRNA levels were increased approx. 150% in implanted lambs compared with  
unimplanted lambs. These data suggest that liver may be the source of at  
least part of the increased circulating IGF-I in TBA + E2-implanted  
sheep.

In steers implanted with Revalor-S (120 mg of TBA and 24 mg of E2) for 40  
d, the steady-state concn. of IGF-I mRNA in the longissimus muscle was

68%  
greater than in the longissimus muscle of unimplanted steers.  
Consequently, increased local prodn. of IGF-I by muscle tissue may play a  
role in increasing circulating IGF-I concns. as well as an autocrine or  
paracrine role in stimulating muscle growth in steers implanted with  
Revalor-S.

TI Effect of a combined trenbolone acetate and estradiol implant on  
steady-state IGF-I mRNA concentrations in the liver of wethers and the  
longissimus muscle of steers

TI Effect of a combined trenbolone acetate and estradiol implant on  
steady-state IGF-I mRNA concentrations in the liver of wethers and the  
longissimus muscle of steers

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined  
implant contg. 40 mg of trenbolone acetate (TBA) and 8 mg of



PUBLISHER: American Society of Animal Science  
DOCUMENT TYPE: Journal  
LANGUAGE: English

CODEN: JANSAG; ISSN: 0021-8

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined implant contg. 40 mg of trenbolone acetate (TBA) and 8 mg of estradiol (E2) increased ADG 25% and feed efficiency 23% compared with unimplanted lambs. By d 3 following implantation, sera from wethers implanted with TBA + E2 showed 32% (307 vs. 233 ng/mL) increases in IGF-I concn. compared with sera from unimplanted wethers. This increase was maintained throughout the entire 24-d study. Steady-state hepatic IGF-I mRNA levels were increased approx. 150% in implanted lambs compared with unimplanted lambs. These data suggest that liver may be the source of at least part of the increased circulating IGF-I in TBA + E2-implanted

sheep.

In steers implanted with Revalor-S (120 mg of TBA and 24 mg of E2) for 40 d, the steady-state concn. of IGF-I mRNA in the longissimus muscle was

68%

greater than in the longissimus muscle of unimplanted steers. Consequently, increased local prodn. of IGF-I by muscle tissue may play a role in increasing circulating IGF-I concns. as well as an autocrine or paracrine role in stimulating muscle growth in steers implanted with Revalor-S.

TI Effect of a combined trenbolone acetate and estradiol implant on steady-state IGF-I mRNA concentrations in the liver of wethers and the longissimus muscle of steers

TI Effect of a combined trenbolone acetate and estradiol implant on steady-state IGF-I mRNA concentrations in the liver of wethers and the longissimus muscle of steers

AB Treatment of lambs (initial BW 28 kg) for 24 d with a combined implant contg. 40 mg of trenbolone acetate (TBA) and 8 mg of

estradiol (E2) increased ADG 25% and feed efficiency 23% compared with unimplanted lambs. By d 3 following implantation, sera from wethers implanted with TBA + E2 showed 32% (307 vs. 233 ng/mL) increases in IGF-I concn. compared with sera from unimplanted wethers. This increase was maintained throughout the entire 24-d study. Steady-state hepatic IGF-I mRNA levels were increased approx. 150% in implanted lambs compared with unimplanted lambs. These data suggest that liver may be the source of at least part of the increased circulating IGF-I in TBA + E2-implanted

sheep.

In steers implanted with Revalor-S (120 mg of TBA and 24 mg of E2) for 40 d, the steady-state concn. of IGF-I mRNA in the longissimus muscle was

68%

greater than in the longissimus muscle of unimplanted steers. Consequently, increased local prodn. of IGF-I by muscle tissue may play a role in increasing circulating IGF-I concns. as well as an autocrine or paracrine role in stimulating muscle growth in steers implanted with Revalor-S.

IT Cattle  
Liver  
Muscle  
Sheep

(combined trenbolone and estradiol implant effects on IGF-I in liver of wethers and muscle of steers)

IT 50-28-2, Estradiol, biological studies 10161-33-8, Trenbolone  
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)

(combined trenbolone and estradiol implant effects on IGF-I in liver of wethers and muscle of steers)

IT 67763-96-6, Insulin-like growth factor I  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(combined trenbolone and estradiol implant effects on IGF-I in liver of wethers and muscle of steers)

L8 ANSWER 6 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:767377 CAPLUS

DOCUMENT NUMBER: 128:71699

TITLE: Black market in anabolic steroids-analysis of illegally distributed products

AUTHOR(S): Musshoff, Frank; Daldrup, Thomas; Ritsch, Mathias  
CORPORATE SOURCE: Institute of Legal Medicine, Rheinische

Friedrich-Wilhelms-University, Bonn, Germany  
SOURCE: J. Forensic Sci. (1997), 42(6), 1119-1125

L8 ANSWER 8 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:618686 CAPLUS  
DOCUMENT NUMBER: 125:257197  
TITLE: **Implant** packages for veterinary use  
PATENT ASSIGNEE(S): American Home Products Corp., USA  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
JP 08206176	A2	19960813	JP 1995-275894	19951024
BR 9504552	A	19970902	BR 1995-4552	19951025

PRIORITY APPLN. INFO.: US 1994-329562 19941026

AB Trenbolone-contg. **implants** for veterinary use are sealed in light-blocking containers with inert gases. The prepn. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.

TI **Implant** packages for veterinary use

TI **Implant** packages for veterinary use

AB Trenbolone-contg. **implants** for veterinary use are sealed in light-blocking containers with inert gases. The prepn. were effective in increasing the body wt. of cattle, showed storage-stability, and required no refrigeration.

ST **implant** package veterinary

IT Veterinary medicine  
(**implant** packages contg. trenbolone for veterinary use)

IT Pharmaceutical dosage forms  
(**implants, implant** packages contg. trenbolone for veterinary use)

IT 10161-33-8, Trenbolone  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**implant** packages contg. trenbolone for veterinary use)

L8 ANSWER 9 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:433703 CAPLUS  
DOCUMENT NUMBER: 125:113572  
TITLE: **Implant** program effects on performance and carcass quality of steer calves finished for 212 days  
AUTHOR(S): Samber, J. A.; Tatum, J. D.; Wray, M. I.; Nichols, W. T.; Morgan, J. B.; Smith, G. C.  
CORPORATE SOURCE: Department of Animal Sciences, Colorado State University, Fort Collins, CO, 80523, USA  
SOURCE: J. Anim. Sci. (1996), 74(7), 1470-1476  
CODEN: JANSAG; ISSN: 0021-8812  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality triats of crossbred steer calves (n = 560) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV of d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d

(RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher ( $P < .05$ ) shear force values than steaks from CON steers.

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

TI **Implant** program effects on performance and carcass quality of steer calves finished for 212 days

AB We compared the effects of seven **implant** treatments combining use of Ralgro (RAL), Synovex-S (SYN), and Revalor-S (REV) on performance and beef quality traits of crossbred steer calves ( $n = 560$ ) finished for 212 d. A randomized complete block design was used to compare treatments consisting of 1) non-implanted control (CON); 2) RAL on d 0, SYN on d 60, and REV on d 130 (RALSYNREV); 3) RAL on d 0, REV on d 60, and REV on d 130 (RALREVREV); 4) SYN on d 30 and REV on d 130 (SYNREV); 5) REV on d 30 and REV on d 130 (REVREV); 6) REV on d 0, REV on d 75, and REV on d 150, 12.5% crude protein diet (REV3X-12.5); and 7) REV on d 0, REV on d 75, and REV on d 150, 14.5% crude protein diet (REV3X-14.5). All **implant** groups had higher ADG and gained more efficiently (ADG: feed intake) than the CON group. No distinct performance advantages were noted for particular **implant** schemes. **Implant** treatments did not ( $P > .05$ ) affect dressing percentage, carcass wt., or KPH fat percentage. Fat thickness did not differ ( $P > .05$ ) for implanted vs CON steers; however, REVREV, SYNREV, and RALREVREV steers produced fatter carcasses than did REV3X-12.5 and RALSYNREV steers. The REV3X-12.5 and REV3X-14.5 treatments increased longissimus muscle area compared with CON; longissimus muscle areas for all other treatments did not differ ( $P > .05$ ) from CON. No redn. in percentage of Choice and Prime carcasses occurred with use of SYNREV or REVREV; however, all treatments receiving three successive **implants** had lower ( $P < .05$ ) percentages of Choice and Prime carcasses than the CON group. Increasing dietary crude protein seemed to lessen the detrimental effect of three successive REV **implants** on percentages of Choice and Prime carcasses. Loin

steaks from REVREV, REV3X-12.5, and REV3X-14.5 steers had higher (P < .05)

shear force values than steaks from CON steers.

ST trenbolone **implant** carcass meat beef

IT Animal growth

Cattle

Food functional properties

(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT Meat

(beef, **implant** program effects on performance and carcass quality of steer calves finished for 212 days)

IT 10161-33-8, Trenbolone

RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)

(**implant** program effects on performance and carcass quality of steer calves finished for 212 days)

L8 ANSWER 10 OF 38 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:622306 CAPLUS

DOCUMENT NUMBER: 121:222306

TITLE: Effect of naturally occurring and synthetic androgens on growth, body composition and muscle glucocorticoid receptors in wether lambs

AUTHOR(S): Galbraith, H.; Berry, A. D.

CORPORATE SOURCE: School Agriculture, University Aberdeen, Aberdeen, AB9

1UD, UK

SOURCE: Anim. Prod. (1994), 58(3), 357-64

CODEN: ANIPA8; ISSN: 0003-3561

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Twenty five Border Leicester female X Blackface male wether lambs aged about 4 mo and weighing on av. 28.5 kg were allocated to be treated with the naturally occurring steroid testosterone or trenbolone acetate or nandrolone phenylpropionate which are steroids synthetically produced. Treatment groups were as follows: untreated controls (C); 50 mg testosterone (T); 50 mg trenbolone acetate (TA) 50 mg testosterone + 50

mg

trenbolone acetate (TTA) or 50 mg nandrolone phenylpropionate (N). **Implants** were given at 100 and again at 63 days before slaughter. The lambs were offered to appetite a good quality diet contg. per kg dry matter, an estd. 11.0 M metabolizable energy and 185 g crude protein. Comparisons were made for the main effects of T and TA and also interactions between T and TA. Effects due to N were assessed statistically against untreated controls. Treatment with T, on av., increased live-wt. gain (LWG), empty body wt. (EBW) and reduced backfat thickness and the wt. (g/kg EBW) of perirenal and retroperitoneal fat. Main effects due to TA were increases in killing-out ratio and depth of the gigot joint and redns. in backfat thickness. Treatment with N increased the empty body wt. and (g/kg) carcass ash. Non-significant trends were suggested for increases in carcass crude protein due to T and TA treatments. T and TA but not N treatments exhibited marked androgenic activity in increasing the wt. (mg/kg EBW) of the accessory vesicular gland. TA and N, but not T, reduced the wt. (g/kg EBW) of the thymus gland. The max. binding capacity of post-mortem skeletal muscle (m. gluteus) for (3H)-dexamethasone was reduced by TA but increased by T and N. These results suggest differences in the binding capacity of corticosteroid receptors which may be related to differences in the effects of T and TA on protein metab. in skeletal muscle.

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1986:491544 CAPLUS

DOCUMENT NUMBER: 105:91544

TITLE: Synchronization of estrus in postpartum beef cows with

melengestrol acetate and prostaglandin F2.alpha.

AUTHOR(S): Beal, W. E.; Good, G. A.

CORPORATE SOURCE: Virginia Polytech. Inst. and State Univ., Blacksburg, VA, 24061, USA

SOURCE: J. Anim. Sci. (1986), 63(2), 343-7

CODEN: JANSAG; ISSN: 0021-8812

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Synchronization of estrus in postpartum beef cows with melengestrol acetate and prostaglandin F2.alpha.

AB The combination of melengestrol [5633-18-1] as acetate (MGA) fed for 9 days (d) and PGF2.alpha. [551-11-1] administered on the last day of MGA feeding synchronized estrus in cyclic cows (94%) and induced estrus in anestrus cows (66%) as effectively as combining PGF2.alpha. with a progestin **implant** (97 and 75%, resp.). In the 2nd expt., MGA treatment was necessary for 4 d prior to administering PGF2.alpha. to maximize the expression of estrus in cyclic and anestrus cows. In both expts. the proportion of cows exhibiting a synchronized estrus and the pregnancy rates tended to be higher for cows that were cyclic prior to treatment. However, the MGA-PGF2.alpha. treatments consistently induced estrus in >50% of the anestrus cows and .apprx.33% of the cows that were anestrus prior to treatment conceived during the synchronized breeding period. The MGA-PGF2.alpha. treatment was 33-46% less expensive than a comparable estrous synchronization method that is approved by the U.S. Food and Drug Administration. If feeding MGA nd administering

PGF2.alpha.  
is approved, it may be the treatment of choice for synchronizing estrus in cyclic cows and inducing estrus in anestrus cows when supplemental feeding is feasible.

AB The combination of melengestrol [5633-18-1] as acetate (MGA) fed for 9 days (d) and PGF2.alpha. [551-11-1] administered on the last day of MGA feeding synchronized estrus in cyclic cows (94%) and induced estrus in anestrus cows (66%) as effectively as combining PGF2.alpha. with a progestin **implant** (97 and 75%, resp.). In the 2nd expt., MGA treatment was necessary for 4 d prior to administering PGF2.alpha. to maximize the expression of estrus in cyclic and anestrus cows. In both expts. the proportion of cows exhibiting a synchronized estrus and the pregnancy rates tended to be higher for cows that were cyclic prior to treatment. However, the MGA-PGF2.alpha. treatments consistently induced estrus in >50% of the anestrus cows and .apprx.33% of the cows that were anestrus prior to treatment conceived during the synchronized breeding period. The MGA-PGF2.alpha. treatment was 33-46% less expensive than a comparable estrous synchronization method that is approved by the U.S. Food and Drug Administration. If feeding MGA nd administering

PGF2.alpha.  
is approved, it may be the treatment of choice for synchronizing estrus in cyclic cows and inducing estrus in anestrus cows when supplemental feeding is feasible.

IT 5633-18-1

RL: BIOL (Biological study)

(estrus synchronization by, in cows, PGF2.alpha. in relation to)

enhancer)

=> s l6 and (kenison?/in or zollers?/in or zollers/au or kenison/au)

'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'AU' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'AU' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
L19 0 L6 AND (KENISON?/IN OR ZOLLERS?/IN OR ZOLLERS/AU OR KENISON/AU)

=> s (kenison?/in or zollers?/in or zollers/au or kenison/au)

'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'AU' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'AU' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
'IN' IS NOT A VALID FIELD CODE  
L20 175 (KENISON?/IN OR ZOLLERS?/IN OR ZOLLERS/AU OR KENISON/AU)

=>

6/6/03